and the intermediate ring in each case having conical surfaces, via which they are connected at least indirectly to one another, and at least one of the synchro rings and/or the intermediate ring consisting of a metallic basic material, wherein at least one of the synchro rings and the intermediate ring consist of the metallic basic material which is nitride-hardened in such a way that, by process parameters being set during nitride-hardening, one of a non-metallic γ'-connecting layer and a non-metallic ε-connecting layer is formed on a conical surface of at least one of the synchro rings and the intermediate ring.

13. (NEW) Synchronizing device according to Claim 12, wherein a γ'-connecting layer is formed which consists of Fe_4N.

14. (NEW) Synchronizing device according to Claim 12, wherein a ε-connecting layer is formed which consists of $Fe_{2-3}N$.

15. (NEW) Synchronizing device according to Claim 12, wherein at least one of the synchro rings and the intermediate ring is plasma-nitride-hardened.

16. (NEW) Synchronizing device according to Claim 12, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sintered material.

17. (NEW) Synchronizing device according to Claim 12, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sinter-forged material.

18. (NEW) Synchronizing device according to Claim 12, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a hardenable steel.

19. (NEW) Synchronizing device according to Claim 12, wherein the nitriding depth is 200 to 800 μm.

20. (NEW) Synchronizing device according to Claim 12, wherein the γ'-connecting layer and the ε-connecting layer is 1 to 20 μm, preferably approximately 10 μm, thick.

21. (NEW) Synchronizing device according to Claim 12, wherein the intermediate ring is arranged between the inner synchro ring and the outer synchro ring, the conical surfaces of the intermediate ring having a friction layer, and the γ'- or ε connecting layer being in each case located on the conical surfaces of the two synchro rings in the outer region.

22. (NEW) Synchronizing device according to Claim 12, wherein the inner synchro ring or the outer synchro ring is firmly connected to a gearwheel, the γ'- or ε-connecting layer being applied to one synchro ring, and the friction layer being applied to the other synchro ring.

23. (NEW) Synchronizing device according to Claim 13, wherein a ε-connecting layer is formed which consists of $Fe_{2-3}N$.

24. (NEW) Synchronizing device according to Claim 13, wherein at least one of the synchro rings and the intermediate ring is plasma-nitride-hardened.

25. (NEW) Synchronizing device according to Claim 14, wherein at least one of the synchro rings and the intermediate ring is plasma-nitride-hardened.

26. (NEW) Synchronizing device according to Claim 13, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sintered material.

27. (NEW) Synchronizing device according to Claim 14, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sintered material.

28. (NEW) Synchronizing device according to Claim 13, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sinter-forged material.

29. (NEW) Synchronizing device according to Claim 14, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a sinter-forged material.

30. (NEW) Synchronizing device according to Claim 13, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a hardenable steel.

31. (NEW) Synchronizing device according to Claim 14, wherein the metallic basic material of at least one of the synchro rings and the intermediate ring is a hardenable steel.

32. (NEW) Synchronizing device according to Claim 13, wherein the nitriding depth is 200 to 800 μm.

33. (NEW) Synchronizing device according to Claim 14, wherein the nitriding depth is 200 to 800 μm.

34. (NEW) A synchronizing device assembly for a vehicle shift transmission, comprising:

a first synchro ring with a first friction surface, and

a second synchro ring with a second friction surface which in use selectively engages the first friction surface,

wherein said first synchro ring is formed of a metallic base material, and

wherein said first synchro ring is nitride hardened to form one of a non-metallic γ'-connecting layer and a non-metallic ε-connecting layer on said first friction surface.

35. (NEW) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is nitride hardened to form a non-metallic γ'-connecting layers of Fe_4N on said first friction surface.

36. (NEW) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is nitride hardened to form a non-metallic ε-connecting layers of $Fe_{2-3}N$ on said first friction surface.

37. (NEW) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is plasma-nitride-hardened.

38. (NEW) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is formed of a sintered material.

39. (NEW) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is formed of a sinter-forged material.

40. (NEW) A synchronizing device assembly according to Claim 34, wherein said first synchro ring is formed of a hardenable steel.

41. (NEW) A synchronizing device assembly according to Claim 34, wherein the nitriding depth on the first synchronizing is between 200 and 800 μg.

42. (NEW) A synchronizing device assembly according to Claim 34, wherein the connecting layer is between 1 to 20 μm thick.

43. (NEW) A synchronizing device assembly according to Claim 34, wherein the connecting layer is 10 μm thick.

44. (NEW) A method of making synchronizing device assembly for a vehicle shift transmission, comprising:

a first synchro ring with a first friction surface, and

a second synchro ring with a second friction surface which in use selectively engages the first friction surface,

said method comprising forming said first synchro ring of a metallic base material, and

nitride hardening said first synchro ring to form one of a non-metallic γ'-connecting layer and a non-metallic ε-connecting layer on said first friction surface.

45. (NEW) A method according to Claim 44, wherein said first synchro ring is nitride hardened to form a non-metallic γ'-connecting layers of Fe_4N on said first friction surface.

46. (NEW) A synchronizing device assembly according to Claim 44, wherein said first synchro ring is nitride hardened to form a non-metallic ε-connecting layers of $Fe_{2-3}N$ on said first friction surface.

47. (NEW) A synchronizing device assembly according to Claim 44, wherein said first synchro ring is plasma-nitride-hardened.